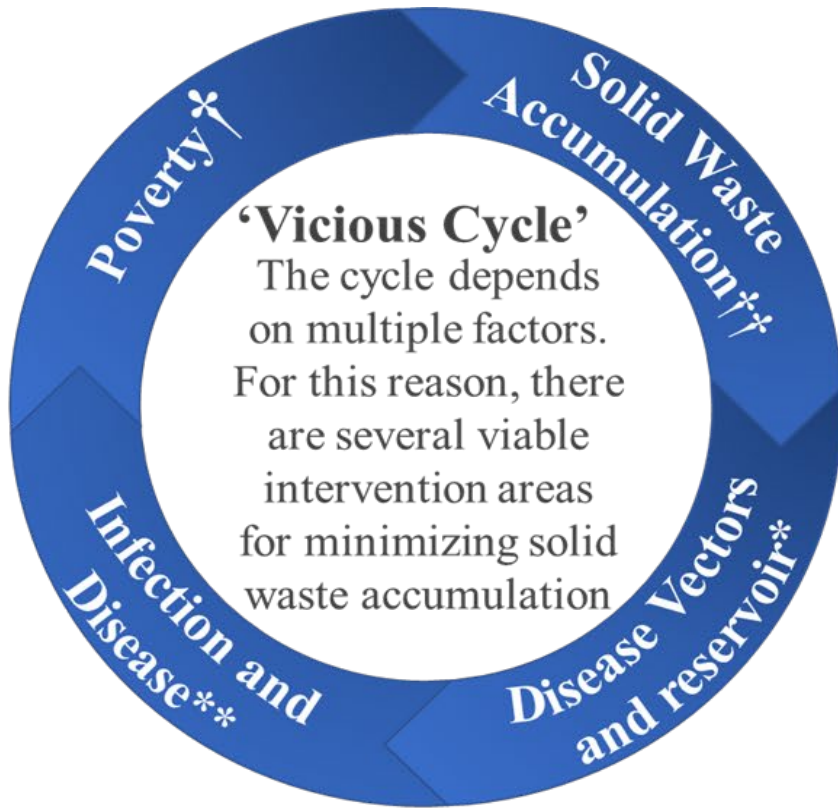




*Trash to Treasure: Collecting trash for profit to reduce vector breeding sites in Kwale County, Kenya*

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**Upstream Innovation Research: develop alternative materials and recycling techniques**

**Upstream Governance & Policy: establish green policies and regulations**

**Downstream Education: reduce consumption**

\*Depends on climate suitability and duration of accumulation

\*\*Depends on vector human contact, circulation of pathogen, and susceptible individuals

†Associated with lack of municipal waste services

† † Non-biodegradable and difficult to recycle or reuse, with little incentive for recycling

# Project Objectives

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Assess the potential for **community-based recycling** that engages aspiring **entrepreneurs to repurpose trash for profit** in Kwale County, Kenya.

To improve 1) health by **reducing arboviral disease transmission** and 2) **alleviate poverty by generating income**



# Specific Aims

## Phase 1



### Community

Identify target communities



### Waste

Identify volumes of waste



### Industry

Scope local solid waste and recycling industries and market opportunities for waste and waste intermediates



### Link

Identify how best to mobilize community members to collect trash and link them with entrepreneurs



### Pilot

Pilot Business incubator to identify local entrepreneurs and connect them with community trash collectors and market opportunities

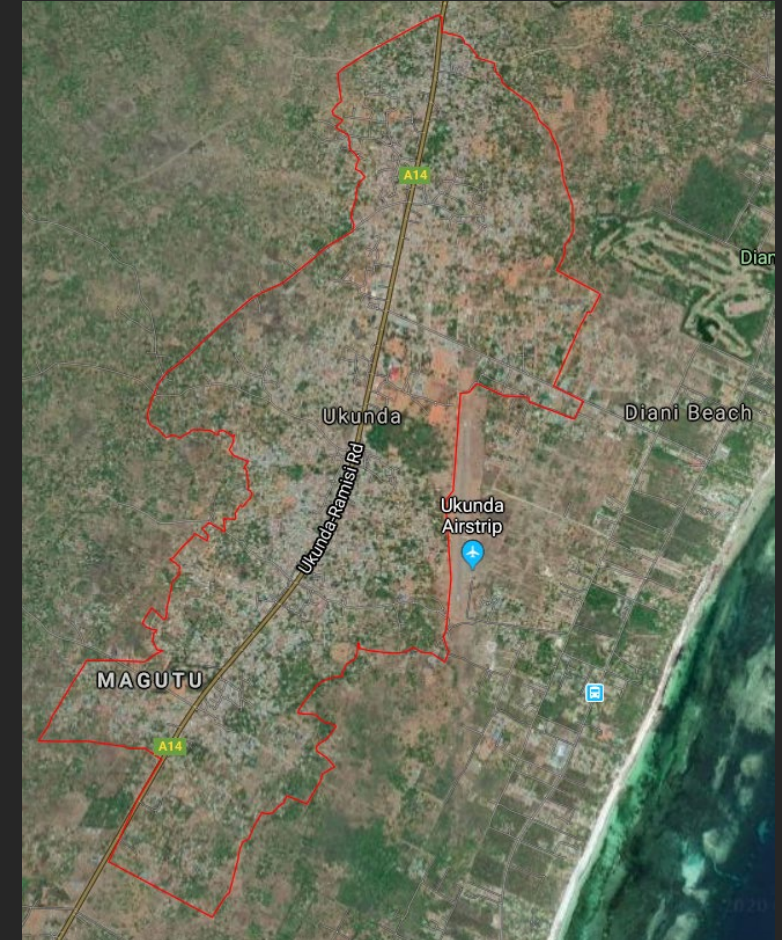
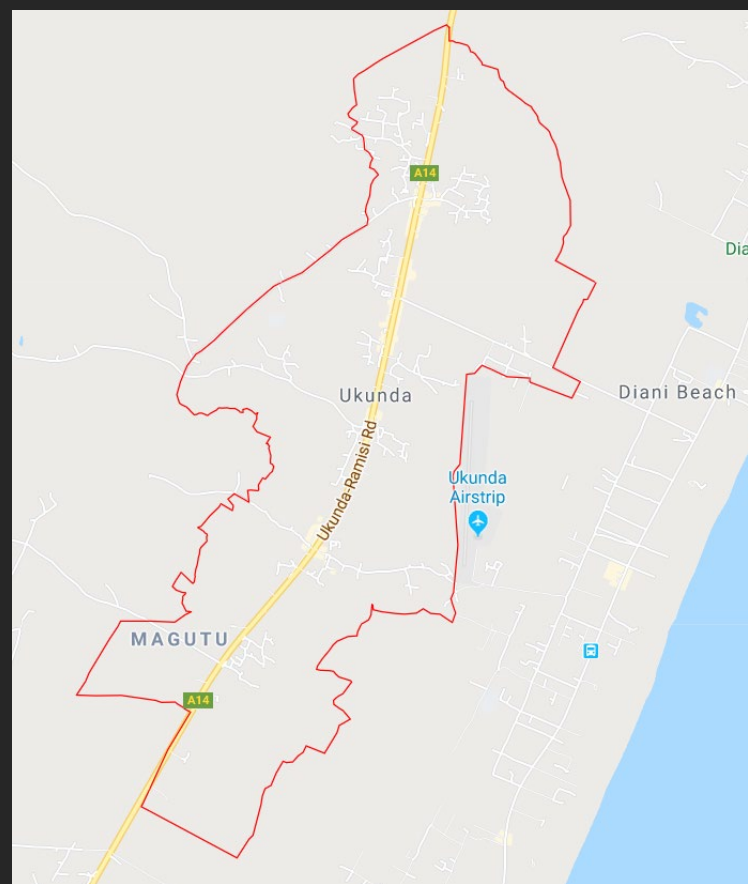


### Assess

Assess the effect of the intervention to reductions in mosquito breeding habitats

# Study Site

- Ukunda, Kwale County, Kenya
- Coastal Community 60 KM south of Mombasa
- CHIKV, DENV, and Malaria Transmission year round



A group of people, including men and women, are standing in a slum area. In the background, there is a large pile of plastic waste, including bottles, cups, and containers. A building with a sign that reads "CALVARIAN ARMY - KENYA EAST TERRITORY COAST DIVISION" is visible. The scene is outdoors with trees and a blue sky with clouds.

# Progress to Date

Engaging local entrepreneurs, policy makers, community leaders and NGO's.

# Key-informant interviews

Identified 14 target communities, are 7 engaging community leaders and 2 NGOs to mobilize entrepreneurs and have mapped the landscape of trash volumes and market opportunities through key-informant interviews.



# Observed behavior: Clean-up of no purpose containers

Kenyan entrepreneurs are interested in reusing plastics and some programs are already collecting and sorting trash and making items such as building materials and art on a small scale.

Creating wider demand will be a challenge.



250 school kids from 5 primary schools in coastal Kenya collected 17,200 mosquito breeding containers (trash). Those containers were repurposed to grow 4,000 native tree seedlings which are now being planted in the schools and homes.



# Key-informant interviews and FGDS

- 8 FGDS from young and old adults by gender from 3 localities in the study area
- 1 FGD with trash collectors
- 1 key informant with PHO, ward administrator and NEMA





# Reasons for Accumulation of trash

## Community

- Low community knowledge on trash management
- Stigma associated with handling trash (attitude and perceptions; trash is dirty).
- Plastic bottles are not classified as valuable trash-- lack of financial incentives.

*“The community do not like being seen dealing with trash because trash is dirty. So it forces them to dump anywhere which become a habit and eventually the trash accumulate”*

## County government

- Fewer staff involved in trash management who are poorly trained and without the appropriate tools.
- Irregular emptying of trash bins resulting in overflowing disposal bins
- Poor enforcement of laws governing trash management
- Trash bins are few and only placed a long the main roads



# Community knowledge on Plastic Recycling



- Community knowledge on recycling is low
  - Confused with re-use
  - Collecting and selling of plastics
  - Not aware of any recycling activities or opportunities
  - Community does not attach any value to used plastics
- Community felt recycling could create employment, clean environment, produce new products, and improve the economy

*“But there are these plastic bottles; I do not know what to do with it. We suggest that people can be called to collect them and take it to recycling plants. We do not know what they will do with them but at least it would have reduced from our households (Male FGD zone 10-P8)”*

# Next Steps

- Develop curriculum.
- Conduct community KAP survey.
- Recruit social entrepreneurs.
- Pilot the social entrepreneur incubator.
- Execute business plans to remove trash from the environment.



## INVITATION! INVITATION! PLASTIC WASTES ENTREPRENEURS

### Trash to Treasure: Collecting trash for profit to reduce mosquito breeding sites

Who are we?	Who we are looking for?*	Are you interested?***
<ul style="list-style-type: none"><li>• We want to work with trash collectors and entrepreneurs to make more profit from trash in order to reduce mosquito-borne diseases in Kwale County.</li><li>• We would like to network and train potential entrepreneurs through a 6-month business incubator process to enhance sustainability of these businesses.</li></ul> 	<p>We are looking for aspiring entrepreneurs to re-purpose trash for profit in Kwale County, Kenya.</p> <p>The entrepreneurs (individual or group) should have the following qualifications:</p> <p><b>Required qualifications:</b></p> <ul style="list-style-type: none"><li>• Deals in any of the following: collecting, re-designing plastic wastes for better uses, buying or selling plastic wastes for profit making</li><li>• Literate and communicates effectively in Kiswahili</li><li>• Willing to work in Kwale County</li></ul> <p><b>*Women and youth are encouraged to apply!</b></p>	<p><b>Apply now:</b></p> <p>Online: <a href="https://is.gd/trashtotreasure">https://is.gd/trashtotreasure</a> OR Call: +254-725-242-813 OR Email: <a href="mailto:bovaplastics@gmail.com">bovaplastics@gmail.com</a></p>  <p><b>Questions:</b></p> <p>+254-725-242-813 / <a href="mailto:bovaplastics@gmail.com">bovaplastics@gmail.com</a></p> <p><b>**Only shortlisted applicants will be contacted.</b></p> 

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# Thank you

